



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

C3-12-3

Job Sheet 177022



Part No: C3-12-3

Job Qty: 4 ea

Part Name: Lock - C3 Hook



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 5/4/18

Job Tracking No:

Due Date: 5/24/18

Created By: Michelle Gagnon-Donovan

Type: Stock

Description:

Note: DWG C3-12-3 Rev. 10 IPP Rev. A 18.04.19 new issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	4 Ea	5/24/18	5/24/18	0.00	0.00	Start Up Machining-1	45	9-18/05/14
100	Bandsaw	4 pcs	5/24/18	5/24/18	0.00	4.00	Bandsaw1	9-8/18/05/14	9-18/05/14
120	CNC Vertical Machining	4 pcs	5/24/18	5/24/18	2.00	4.00	HAAS-1 UV-5000	9-18/05/14	9-18/05/14
130	QC	4 pcs	5/24/18	5/24/18	0.00	0.00	QC2 Machining-5	9-18/05/14	9-18/05/14
140	QC	4 pcs	5/24/18	5/24/18	0.00	0.00	QC8 Machining-5	9-18/05/14	9-18/05/14
150	Outsource	4 pcs	5/24/18	5/24/18	0.00	0.00	Outsource1	9-18/05/14	9-18/05/14
160	Outsource	4 pcs	5/24/18	5/24/18	0.00	0.00	Outsource15	9-18/05/14	9-18/05/14
170	Packaging	4 pcs	5/24/18	5/24/18	0.00	0.00	Packaging2	9-18/05/14	9-18/05/14
180	QC	4 pcs	5/24/18	5/24/18	0.00	0.00	QC6	9-18/05/14	9-18/05/14
190	Packaging	4 pcs	5/24/18	5/24/18	0.00	0.00	Packaging3-2	9-18/05/14	9-18/05/14
200	QC21-SA	4 Ea	5/24/18	5/24/18	0.00	0.00	QC21	9-18/05/14	9-18/05/14

Part Op 100 - 1- Cut 3.90" long

Descriptions: 120 - 1-Machine as per folio FB C.085 FOLIO REV: 2-Machine
Engrave S/N 3-Debur ~~*** SEE DEL FOR PROGRAMMING NEW BATCH NUMBER EVERY TIME ***~~
150 - 1-Issue P/O to Metcore ; P/O 30946 RC 44-46 2-Bead blast 3- Certificate of Conformity is required
NOTE DROP SHIP TO FINISHER Metcore to ship directly to Groupe Altech or ATG***
160 - 1-Issue P/O to Groupe Altech: P/O 40059 -Nickel plate, QQ-N-290, Class 2, Grade E or F -Nickel Plate .0004-
.0006 - Certificate of Conformity is required
170 - Receive
190 - Identify and Stock

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
MT-4140-B-1.250X1.500	AISI 4140 Steel Bar	1.2920 ft (.323 ea)	90-Start up Operation	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	MT-4140-B-1.250X1.500	1	6	0

5049428

Part Specifications

Specifications could not be found.

Plex 5/4/18 12:30 PM Dart.Gagnon.Michelle

PROGRAM AND TULIO DONE ***
READY FOR FLOOR ***



Container No: S070892



Part: C3-12-3

Job No: 177022

Serial No/Batch: S070892

Revision: 10

Inspector:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 813 832-5200
Email: sales@dartaero.com
www.dartaerospace.com

DART AEROSPACE LTD		Work Order:	177022
Description: Lock - C3 Hook		Part Number:	C3-12-3
Inspection Dwg: C3-12-3	Rev: 10	Page 1 of 1	

INSPECTION SHEET

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
3.678	±.005	3.681	—		Vern H/LD	
.163	±.005	.165	—		"	
.565	±.005	.563	—		"	
.02X45°	±.010X±1/2°	.015X45°	—		"	
R.03	±.010	R.030	—		R-L	
R.03	±.010	R.030	—		"	
.169	±.005	.167	—		Vern H/LD	
.850	±.005	.8504	—		"	
.513	±.005	.518	—		"	
.143	±.005	.143	—		"	
.03X45°	±.010X±1/2°	.020X45°	—		"	
.058	±.005	.058	—		"	
.124	±.005	.123	—		"	
.240	±.005	.2398	—		"	
.77	±.010	.768	—		"	
.788	±.005	.788	—		"	
.266	±.005	.266	—			
Ø.505	±.001	Ø.505	—		G-pin	
1.373	±.005	1.373	—			
30°	±1/2°	30°	—		C-Square	
90°	±1/2°	90°	—		"	
Ø.379	±.005	Ø.379	—		G-pin	
.150	±.005	.150	—		Vern H/LD	
1.381	±.005	1.382	—		"	
.069	±.005	.071	—		"	
1.267	±.005	1.267	—		"	
1.237	±.005	1.237	—		"	
1.00	±.010	.994	—		"	
.636	±.010	.640	—		"	

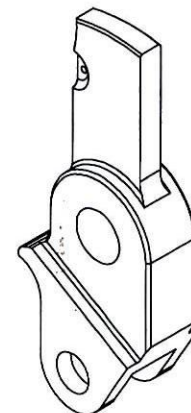
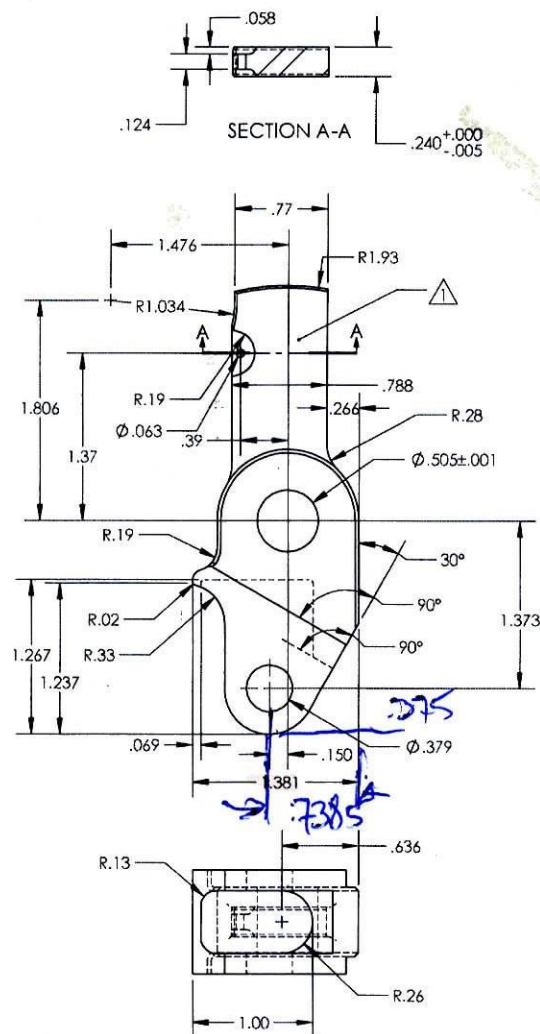
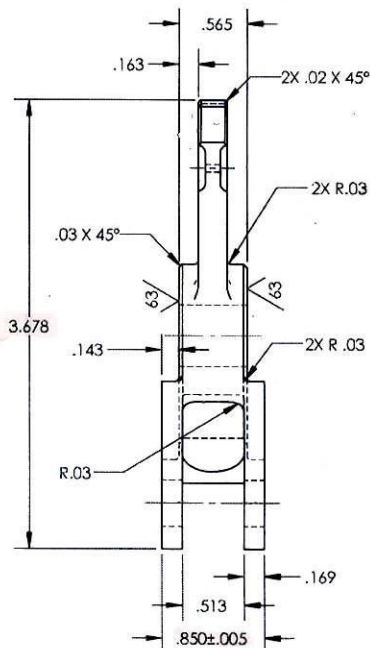
Measured by: <i>gwh</i>	Checked by: <i>BA</i>	QC Inspector:
Date: 18/05/14	Date: 18-05-15	Date:

Engineering Approval: (If necessary)	Date:
--	--------------

Rev	Date	Change	Revised by	Approved
A	14.07.31	New Issue	KJ	

This drawing, specifications, and contents contained herein are the sole property of Dart Aerospace and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
8		AS DRAWN BY CANAM	8/3/2012	RJC	
9		CHD .515 SLOT RADIUS FROM R.063 TO R.130.	10/25/2012	RJC	DE
10	14-0109	CHD TITLE BLOCK WAS RED BARN & DART. ADDED MACHINE ENGRAVE NOTE. CHD TOLERANCE NON-CRITICAL DIMENSIONS. DELETED DUPLICATE DIMENSION .513.	8/1/2014	DJN	RW



NOTE:

① MACHINE ENGRAVE BATCH NUMBER.

		TITLE	
		LOCK C3-HOOK	
DWG NO.		C3-12-3	REV 10
MATL 4140	DRAWN BY: CANAM	APPROVED: <i>D. Weil</i>	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		TEST RC 44-48	
.XXX ± .005 FRACTIONS ± 1/8		TREAT NICKEL PLATE	
.XX ± .01 ANGLES ± .5°		SPEC .0005 THICK	
.X ± .1		USED ON MODEL	
1. BREAK ALL SHARP EDGES .015 X 45° OR .015R			
2. DIMENSIONAL LIMITS APPLY AFTER PLATING			
SCALE 1:1	DATE 10/26/2007	SHEET 1 OF 1	

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
			C3-12-3	1	LOCK	4140	1 X 1-1/2 X 3-3/4	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER :					



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO039948**

Supplier: ATL002-VC
Atlantic Heat Treat 2001
401 Frankcom
Ajax
ON
L1S R14 Canada
Phone: 866 257 6395

PO No: PO039948
PO Date: 5/18/18
Due Date: 5/29/18
Purchase Order
Revision:
Revision Date:
Ship-To Contact: Tsimiklis, Chrisoula

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Pynt Terms: Net 30
Freight Terms:
Special Comments:

Items

Line Item	Job	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	171765	RB T102137-107-103	Strap 1-Issue P/O to Atlantic Heat Treat; P/O _____ RC 32-38 2-Bead blast 3- Certificate of Conformity is required Material 4140	Firmed	5/29/18	6 pcs	0 pcs 6x	6 pcs	\$13.195/pcs AT 18/05/31	\$79.17
2	173518	RBT400229-07	Top 1-Issue P/O to Atlantic Heat Treat; P/O _____ RC 32-38 2-Bead blast 3- Certificate of Conformity is required Material 4140 ***NOTE*** DROP SHIP TO FINISHER Atlantic Heat Treat to ship directly to Groupe Altech***	Firmed	5/29/18	10 pcs	0 pcs 10x	10 pcs	\$8.513/pcs AT 18/05/31	\$85.13
3	177022	C3-12-3	Lock - C3 Hook 1-Issue P/O to Metcore ; P/O _____ RC 44-46 2-Bead blast 3- Certificate of Conformity is required Material 4140 ***NOTE*** DROP SHIP TO FINISHER Metcore to ship directly to Groupe Altech or ATG***	Firmed	5/29/18	4 pcs	0 pcs 4x	4 pcs	\$18.75/pcs AT 18/05/31	\$75.00
Grand Total:										\$239.30

Order Notes

CT

Certification

Date: 25/05/2018

Entry Date: 25/05/2018

Page: 1 of 1

To:DART AEROSPACE LTD.
1270 ABERDEEN ST

Purchase Order No.: po039948

Packing List No.:

HAWKESBURY ON K6A 1K7

Material: 4140

We are pleased to provide you with the following Certificate of Compliance.

Quantity	Part Number / Part Name / Part Description	Pounds
4	4 pcs material 4140 annealing and heat trt 44-46 rc c of c sand blast prt# c3-12-3	1

Insp. Type	Scale	Minimum	Maximum	Number	Other
------------	-------	---------	---------	--------	-------

Customer Requirements:

Harden rockwell

Results:

Harden ROCKWE 44. 46. 44. tested as per sampling plan
heated to 44 rc with sand blast as per cust requested

STATEMENT OF LIMITED LIABILITY (PLEASE READ CAREFULLY). ALL WORK IS ACCEPTED SUBJECT TO THE FOLLOWING CONDITIONS: It is recognized that even after employing all the scientific methods known to us, hazards still remain in metal treating. THEREFORE, OUR LIABILITY SHALL NOT EXCEED TWICE THE AMOUNT OF OUR CHARGES FOR THE WORK DONE ON ANY MATERIAL (FIRST TO REIMBURSE FOR THE CHARGES AND SECOND TO COMPENSATE IN THE AMOUNT OF THE CHARGES), EXCEPT BY WRITTEN AGREEMENT SIGNED BY THE METAL TREATER. THE CUSTOMER, BY CONTRACTING FOR METAL TREATMENT, AGREES TO ACCEPT THE LIMITS OF LIABILITY AS EXPRESSED IN THIS STATEMENT TO THE EXCLUSION OF ANY AND ALL PROVISIONS AS TO LIABILITY ON THE CUSTOMER'S OWN INVOICES, PURCHASE ORDERS OR OTHER DOCUMENTS. IF THE CUSTOMER DESIRES HIS OWN PROVISIONS AS TO LIABILITY TO REMAIN IN FORCE AND EFFECT, THIS MUST BE AGREED TO IN WRITING, SIGNED BY AN OFFICER OF THE TREATER, IN SUCH EVENT, A DIFFERENT CHARGE FOR OUR SERVICES REFLECTING THE HIGHER RISK TO TREATER, SHALL BE DETERMINED BY THE TREATER AND CUSTOMER. THE TREATER MAKES NO EXPRESS OR IMPLIED WARRANTIES AND SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTY OF THE FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY, AS TO THE PERFORMANCE OF CAPABILITIES OF THE MATERIAL AS HEAT TREATED, OR THE HEAT TREATMENT. THE AFOREMENTIONED LIMITATION OF LIABILITY STATED ABOVE IS SPECIFICALLY IN LIEU OF ANY EXPRESS OR IMPLIED WARRANTY, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS, AND OF ANY OTHER SUCH OBLIGATION ON THE PART OF THE TREATER. No claim for shortage in weight or count will be entertained unless presented within five (5) working days after receipt of materials by customer. No claim will be allowed for shrinkage, expansion, deformity, or rupture of material in treating or straightening, except by prior written agreement, as above, nor in any case for rupture caused by or occurring during subsequent grinding. Whenever we are given material with detailed instructions as to treatment, our responsibility shall end with the carrying out of those instructions. Failure by a customer to indicate plainly and correctly the kind of material (i.e., proper alloy designation) to be treated, shall cause an extra charge to be made to cover any additional expense incurred as a result thereof, but shall not change the limitation of liability stated above. Customer agrees there will be no liability on the treater in contract for any special, indirect or consequential damages arising whatsoever, including but not limited to personal injury, property damage, loss of profits, loss of production, recall or any other losses, expenses or liabilities allegedly occasioned by the work performed on the part of the treater. It shall be the duty of the customer to inspect the merchandise immediately upon its return, and in any event claims must be reported prior to the time that any further processing, assembling or any other work undertaken. OUR LIABILITY TO OUR CUSTOMERS SHALL CEASE ONCE ANY FURTHER PROCESSING, ASSEMBLING OR ANY OTHER WORK HAS BEEN UNDERTAKEN ON SAID MATERIAL. No agent or representative is authorized to alter the above conditions, except by writing duly signed by an officer of treater.


KEAN SHEPHERD
QUALITY CONTROL
ATLANTIC HEAT TREATING 2001 LTD



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO040059**

Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

PO No: PO040059
PO Date: 5/31/18
Due Date: 6/6/18
Purchase Order
Revision:
Revision Date:
Ship-To Contact: Tsimiklis, Chrisoula
Phone:

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pymt Terms: Net 30
Freight Terms:
Special Comments:

Items

Line Item	Job	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	173852	RBE350A93-3300-20	Tail Rotor Hub Socket -Issue P/O to Groupe Altech; PO _____ -Black oxide finish, MIL-C-13924C Class 1 -Certificate of Conformity is required	Firmed	6/5/18	12 pcs	0 pcs	12 pcs	\$3.79/pcs	\$45.48
2	177469	RBE350A93-3400-00-1	Guide -Issue P/O to Groupe Altech; PO _____ -Black oxide finish, MIL-C-13924C Class 1 -Certificate of Conformity is required	Firmed	6/5/18	12 pcs	0 pcs	12 pcs	\$3.20/pcs	\$38.40
3	173354	RBT400313-7	Bolt -Issue P/O to Groupe Altech; PO _____ -Black oxide finish, MIL-C-13924C Class 1 -Certificate of Conformity is required	Firmed	6/5/18	7 pcs	0 pcs	7 pcs	\$1.75/pcs	\$12.25
4	176875	C2-3-3	Latch Roller -Issue P/O to Groupe Altech: P/O _____ -Nickel plate, QQ-N-290, Class 2, Grade E or F -Nickel Plate .0004- .0006 -Bake after plating -Certificate of Conformity is required	Firmed	6/5/18	19 pcs 18	0 pcs 18x	19 pcs	\$10.4347/pcs At 18/06/06	\$198.26

Items										
Line Item	Job	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
5	173518	RBT400229-07	Top -Issue P/O to Groupe Altech: P/O -Zinc plate, ASTM B633 TYPE 1 SC2 - Certificate of Conformity is required -Issue P/O to Groupe Altech: P/O -Zinc plate, ASTM B633 TYPE 1 SC2 - Certificate of Conformity is required	Firmed	6/5/18	10 pcs	0 pcs	10 pcs	\$10.55/pcs	\$105.50
6	177022	C3-12-3	Lock - C3 Hook -Issue P/O to Groupe Altech: P/O -Nickel plate, QQ-N-290, Class 2, Grade E or F -Nickel Plate .0004-.0006 - Certificate of Conformity is required	Firmed	6/5/18	4 pcs	0 pcs	4 pcs	\$10.4347/pcs	\$41.74
7	176605	D5230-5	Mounting Bracket Outsource process-Anodize per QSI017 4.1.10.1 Issue P/O: _____ Black Anodize as per Dwg. D5230	Firmed	6/5/18	10 pcs	0 pcs	10 pcs	\$6.00/pcs	\$60.00
8	177468	RBE350A93-3307-00-03	Washer -Issue P/O to Groupe Altech; PO _____ -Black oxide finish, MIL-C-13964, CLASS 1; MIL-C-16173 GRADE 4 -Certificate of Conformity is required	Firmed	6/5/18	30 pcs	0 pcs	30 pcs	\$0.89/pcs	\$26.70
9	177466	RBE350A93-3303-02-5	Extractor Pin -Issue P/O to Groupe Altech; PO _____ -Black oxide finish, MIL-C-13924C Class 1 -Certificate of Conformity is required	Firmed	6/5/18	30 pcs	0 pcs	30 pcs	\$1.05/pcs	\$31.50
10	173919	RBE350A94-3700-C-07	Top -Issue P/O to Groupe Altech: PO _____ -ANODIZE COLOR RED, PER IAW MIL-A-8625 TYPE-2 CLASS-2, Water sealant As Per Dwg RBE350A94-3700-C-07 Rev 6 -Certificate of Conformity is required	Firmed	6/5/18	30 pcs	0 pcs	30 pcs	\$4.00/pcs	\$120.00
11	177611	SWA3-300	Wire Clamp -Issue P/O to Groupe Altech: _____ -ANODIZE COLOR BLACK, PER IAW MIL-A-8625F TYPE 3 CLASS 2, Water sealant -Certificate of Conformity is required	Firmed	6/5/18	20 pcs	0 pcs	20 pcs	\$3.00/pcs	\$60.00
Grand Total:										\$739.83
Order Notes										

Plex 6/1/18 4:24 PM dart.tsimiklis.chrisoula



Certificat de Conformité / Certificate of Compliance

(009916-1)

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
 Tel: 514-335-3666 Fax: 514-335-3868
 www.groupaltech.com

Bon de Livraison / Packing Slip

009916 - 1

Livré à / Ship to

DART AEROSPACE LTD

1270 ABERDEEN STREET

HAWKESBURY, ON, K6A1K7

CANADA

Tel.: 613-632-5200 Fax.:

Client / Customer:

DART AEROSPACE LTD

1270 ABERDEEN STREET

HAWKESBURY, ON, K6A1K7

CANADA

BUYER:

Date expédition Ship date		Créé Par Generated By	Transport / No de Compte Courier / Acc. No.	Bon de commande Client Customer Purchase Order No.				
04-Jun-2018		Jessie Boisvert		040059				
#Ligne Line#	No. de Série / # Pièce Part Number / Line Item Details Job # / Ref #	Description pièce(s)	CATG. U/M	Comm. /Ordered	Exp/ Shipped	Qté NC/ NC Qty	Qté Scrap/	À venir/ Back Order
4	C2-3-3 Rev.	C2-3-3 01 -E-NIC STEEL 200 [E-NICKEL STEEL 200] QQ-N-290 CLASS 2 GRADE E OR F NICKEL PLATE 0.0004-0.0006 THICK BAKE AFTER PLATING	E-NICKEL-200 CH	19	19	0	0	0
5	C2-3-3 BAKE Rev.	C2-3-3 01 -BAKING, HYDROGEN EMBRITTLEMENT RELIEF	E-NICKEL-200 MIN-CHG	19	19	0	0	0
7	C3-12-3 Rev.	C3-12-3 01 -E-NIC STEEL 200 [E-NICKEL STEEL 200] QQ-N-290 CLASS 2 GRADE E OR F 0.0004-0.0006 THICK	E-NICKEL STEEL CH	4	4	0	0	0

Notes Additionnelles / Additional Notes

Epaisseur réelle
Actual Thickness

Inspecteur Qualité
Quality Inspector

Réçu par
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.
 Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.
 Our financial and legal responsibility will not be higher than the amount of invoice.